

As discussed during our telephone conversation of Tuesday, May 10, 2016, here is the follow-up communique outlining activities and progress to date in the matter of Sky Valley Education Center's Indoor Air Quality (IAQ) and Poly-chlorinated Biphenyl (PCB) concerns.

The school district did not wait until the full report of PBS Environmental's findings had been completed before implementing steps to improve the indoor air quality at Sky Valley. As PBS Environmental's investigation continued, and we received test results or had additional input from staff or parents, the school district began taking immediate steps to remediate the situation.

Updates were provided to Sky Valley staff both in person and in writing. The same written updates were provided to all registered Sky Valley families and the school district's Board of Directors. Additional face to face updates and discussions were held with the Board and with Sky Valley families.

CONSULTANT

January 6, 2016 – Gregg Middaugh a microbiologist and industrial hygienist with PBS Engineering and Environmental – visited Monroe to gain an initial understanding of the issues faced at Sky Valley.

January 12, 2016 – School district signed an initial contract with PBS Engineering and Environmental – a company based in the Pacific Northwest, with offices in Seattle, WA, Portland, OR, and Boise, ID among others – as our Indoor Air Quality consultant.

January 2016 – PBS lead IAQ investigator, Gregg Middaugh, met with both district and Sky Valley staff, reviewed IAQ Reports, visited the site, and put together a testing protocol to investigate the potential sources of the IAQ concerns being reported by some staff and students/families.

February 2, 2016 – PBS Environmental completed their initial on-site assessment of the Sky Valley facility and provided a first draft of a comprehensive sampling plan.

February 4, 2016 – Draft sampling plan was presented to interested Sky Valley staff members, and input regarding additional tests and/or locations for specific tests was sought and provided.

February 9, 2016 – Sampling plan was finalized based on input received from concerned staff and Sky Valley administration, and PBS Environmental is on site to conduct extensive testing (*sampling plan attached*).

February 26, 2016 – PBS Environmental completes initial round of on-site sampling at Sky Valley.

April 15, 2016 – PBS Environmental completes Indoor Air Quality Assessment Report for Sky Valley.

May 12/13, 2016 – PBS Environmental back on site at Sky Valley to take air and wipe samples to re-test areas where some level of PCB contamination was previously found.

PCBs

February 5, 2016 – School district hired Argus-Pacific – a Seattle based consulting and training firm that is part of Terracon Consultants Inc. – to provide PCB handling, remediation, and disposal training to our

in-house maintenance staff. Argus-Pacific also provided us with written guidelines to follow, based on EPA guidance for PCB ballast removal, clean-up, and disposal.

February 2016 – School district purchased a Philips Advance Ballast Checker, model number ABC100, to assist in determining whether fluorescent light ballasts at Sky Valley were modern electronic units, or older magnetic ballasts. Knowing that even magnetic ballasts labeled “No PCBs” could potentially contain minute amounts of PCBs, we wanted to remove all magnetic ballasts from the facility. Our trained maintenance staff began assessing all fluorescent light fixtures in all five buildings of the Sky Valley Education Center upon receipt of the device, and have subsequently removed all magnetic ballasts – including those labeled at the factory as “No PCBs” – and have replaced them with electronic ballasts.

February 2016 - PBS Environmental informed the school district that they had found low levels of PCB contaminants in the air in a limited number of rooms at Sky Valley. This was reported to staff and families of Sky Valley in an update provided by Karen Rosencrans on or about February 13th. Those rooms, as called out by the Snohomish County Health District in their letter of April 25, 2016, are:

- Annex, Room A
- Annex, Room C
- Annex, Room D
- Annex, Room F
- Annex, Montessori Science Prep Room
- Annex, Hall – West
- Annex, Hall – East
- Annex, Girl’s Restroom
- Library/Pod Building, Room 11

March 2016 – Our trained maintenance staff were placed on a medical monitoring program and performed respirator fit testing in preparation for the ballast replacement and fluorescent light fixture cleaning project.

April 2016 - Our trained maintenance staff began the process of cleaning all fluorescent light fixtures at Sky Valley. They prioritized their cleaning based on PBS Environmental’s findings of PCBs in air sampling, and therefore began their work in the Annex Building and Library/Pod Building.

May 2016 – The Maintenance Department completed the cleaning of all fluorescent light fixtures in both the Annex Building and Library/Pod Building, and we had scheduled re-testing of those areas to begin on Thursday, May 12. However, spot checking in advance of the re-testing for PCBs indicated that some fluorescent light fixtures were still not up to expected standards. These fixtures are currently being re-cleaned, or if unable to be satisfactorily cleaned we will replace the ballast cover/pan or the light fixture in its entirety.

May 12, 2016 – The PCB re-testing protocol is to re-test each location where a wipe sample taken by Kendall Moore of EPA Region 5 came back with results at or exceeding the action threshold of 10 µg/kg. This would include the fluorescent light fixture(s) in Rooms C and D in the Annex Building, as well as re-testing of three light fixtures that came in below the 10 µg/kg threshold. These units are being re-tested to confirm the quality of our cleaning methodology and practice. Additional random wipe samples will

be taken by PBS Environmental in other areas of the Sky Valley campus to ensure that we do not have other fixtures with residual PCB contaminants present. Air sampling of all spaces where PBS Environmental previously found some level of PCBs in the air are also being conducted. (*Map of locations of re-testing attached.*)

ASBESTOS

February 12, 2016 – School district hired Walker Specialty Construction to perform clean-up of asbestos debris and removal of asbestos pipe lagging and fittings in an attic area of the gym/music building.

February 19, 2016 – Asbestos air sampling came back negative per PBS Environmental.

February 21/22, 2016 – Walker Specialty Construction addressed clean-up of sheetrock and joint compound dust in areas where wallboard systems had been disturbed for the Network/IT upgrade project, but had not previously been adequately cleaned.

February 25/26, 2016 – School district hired Argus-Pacific to provide updated AHERA Asbestos Worker training for our in-house maintenance staff.

February 26, 2016 – PBS Environmental reported that the tests of ceiling tile material throughout the Sky Valley campus came back negative for asbestos.

March 2016 – Our trained maintenance staff were placed on a medical monitoring program and performed respirator fit testing in preparation for the ballast replacement and fluorescent light fixture cleaning project.

March 5/6, 2016 – Walker Specialty Construction conducted asbestos debris clean up in the North Pod attic, and HEPA vacuumed or wet wiped all stored materials to be retained from that location. All materials not retained were disposed of as asbestos contaminated waste.

March 7, 2016 – Tests conducted on the chemical resistant counters in the Sky Valley science rooms came back negative for asbestos.

March 11-13, 2016 - Walker Specialty Construction conducted asbestos debris clean up in the South Pod attic, and HEPA vacuumed or wet wiped all stored materials to be retained from that location. All materials not retained were disposed of as asbestos contaminated waste.

March 19, 2016 - Walker Specialty Construction conducted asbestos debris clean up in the East Pod attic, and HEPA vacuumed or wet wiped all stored materials to be retained from that location. All materials not retained were disposed of as asbestos contaminated waste.

HOUSEKEEPING

February 2016 – Four new HEPA filtered vacuums are provided for use at Sky Valley. Two backpack units for use by the custodial staff, and two upright units for use by teachers and parents assisting teaching staff.

February 2016 – Custodial services was instructed not to use dry cloths or dust mops. The Custodian Supervisor purchased microfiber cloths for use in damp dusting activities.

February 29, 2016 – A third full-time custodial staff member was hired by Sky Valley.

March 1, 2016 – Deep cleaning of classrooms to significantly reduce the dust, dirt, and overall particulate counts began. This work involved a top down procedure utilizing HEPA vacuuming and/or wet wiping of all horizontal surfaces, and concluded with extracting the carpet or damp mopping of hard surface flooring in the space.

March 29, 2016 – School District hired Seattle Facility Services – a Seattle based cleaning/housekeeping services contractor – to assist district staff with the deep cleaning of Sky Valley spaces. (*Map of division of assignments attached.*)

April 20, 2016 – In-house custodial crew completed deep cleaning of their portion of Sky Valley classrooms, library, and other occupied spaces.

April 28, 2016 – Seattle Facility Services completed deep cleaning of their portions of the Sky Valley facility other than the Art Room. The Art teachers specifically asked that cleaning of their space be delayed until after the Art Show that was scheduled for early May.

May 11, 2016 – Seattle Facility Services sent staff to perform deep cleaning of the Art Room.

VENTILATION

November 2015 – District maintenance staff inspected all HVAC equipment at Sky Valley to ensure that outside air dampers were open, and that the units were programmed for regular operation during the school day.

November 30, 2016 – School district contacted McKinstry – a Seattle based DBOM (design, build, operate, and maintain) mechanical systems contractor – to provide us with a proposal to inspect, verify operation, re-balance, and potentially repair, the unit-ventilators and rooftop mounted heating and ventilation equipment at Sky Valley

November/December 2015 - Maintenance staff completed a thorough cleaning of the primary air chamber of the classroom unit-ventilators.

January 2016 – Repaired and straightened outside air grills on unit-ventilators to ensure re-balancing by mechanical contractor is effective.

January 2016 – District hired McKinstry -- the company that had installed the majority of the unit-ventilators and rooftop mounted units in 2009/10 – to recalibrate and rebalance the mechanical systems. The units were returned to the original 2009/10 outside air settings and CFM of supply air. This work was completed in mid-February.

January 2016 – PBS Environmental recommended that the media filters provided by the manufacturer of the classroom unit-ventilators be replaced with MERV 8 rated filters, properly sized to fit the filter rack.

January 2016 – McKinstry completed the process of recalibrating and re-balancing the Sky Valley unit-ventilators and rooftop mounted units. While conducting this work McKinstry found that four (4) of the units were not functioning or not functioning optimally, and that additional troubleshooting and repairs were required for these units.

February 2016 – McKinstry completed repairs and re-programming of the four (4) unit-ventilators that had previously been found to be non-operational or not operating optimally.

February 2016 – Maintenance contacted the manufacturer of the unit-ventilators to inquire about the use of MERV rated filters. We were told that the unit-ventilators were designed to use simple media filters (non-MERV rated), and that the manufacturer had no guidance or input on utilizing a MERV rated filter in their equipment.

March 2016 – Maintenance ordered MERV 4 filters for all Sky Valley unit-ventilators. They took amperage readings of the unit-ventilator motors before installing the MERV 4 filters, and after installing the new MERV 4 filters. These readings will be compared against motor amperage readings as the filters are utilized and become more and more clogged with filtered debris. If the amperage does not increase too drastically over 90 days, we will assess utilization of either a MERV 6 filter, or our desired MERV 8 filter. Careful monitoring of motor amperage is necessary in order to avoid an electrical fire caused by excessive static pressure across the filter media.

Future (Summer 2016) - Plan to complete the cleaning of non-air chambers such as the motor chamber and controls chamber of classroom unit-ventilators, via HEPA vacuuming and/or wet wiping.

FUNGAL / NON-FUNGAL PARTICULATES

March 4, 2016 – Walker Specialty Construction removed suspect fungal growth from an exterior wall in Room 20, and an exterior wall in the Archery Storage Room off the Boys Locker Room.

March 19, 2016 – Results from fungal particulate testing back. All mold/fungal air samples came back as similar to outside air, with one possible exception. Samples taken in room 2 indicate moderate levels of four fungal species indicative of possible wood rot. Further investigation will be undertaken over the summer.

March 19, 2016 – Results of non-fungal particulate testing back. A number of classroom and other occupied spaces were found to have higher levels of a variety of non-fungal particulates than is desirable. Further investigation will be undertaken over the summer.

April 4-8, 2016 – Walker Specialty Construction removed contaminated sheetrock in the custodial closet off the Library.

CHEMICALS / GASES / METALS

March 7, 2016 – Test results for VOC's (Volatile Organic Compounds) and formaldehyde came back negative.

March 7, 2016 – Tests for Radon gas came back negative, although the Music Room in the Gym/Music Building is higher than we desire at 3.2 pCi/L and 3.3 pCi/L in the two tests conducted. The district began discussion with McKinstry regarding what could be done to increase ventilation and air movement in the “pit” that is below ground level.

March 7, 2016 – Tests of squares of carpet removed from the East Pod in the Library/Pod Building over the Winter Break show no levels of pesticides present.

March 19, 2016 – Soil samples from three locations around the SVEC buildings showed no levels of pesticides, no petroleum hydrocarbons, and levels of metals that were not above the MTCA (Model Toxics Control Act) clean-up level. Tests were conducted for lead, mercury, chromium, cadmium, and arsenic, and only the lead level came in higher than the normal background concentration in Western Washington (24 ppm). The three samples came in at 18 ppm, 37 ppm, and 52 ppm. The required clean-up level is 250 ppm.

GENERAL / OTHER

February 2016 – Maintenance department ordered and installed “No Idle” signs for the Sky Valley parking lot.

February 2016 – The kilns in the art room were moved slightly so that the working kiln is directly under the exhaust hood, and the non-working kiln was moved to the side. Sky Valley wants to retain this second kiln for the future, once it is repaired.

February 2016 – Until such time as the Tech Building HVAC return air system is modified so as to not pull return air from the kiln room, all use of the kiln will be conducted after hours or on weekends, when other staff and students are not present. The two art teachers are the only individuals authorized to operate the kiln, and they are well aware of this requirement.

February 26, 2016 – Water quality test results show that two (2) of sixty-nine (69) faucets or fixtures came back with results above the 20 ppb for lead established under WAC 246-366A-130. These two units were immediately taken out of service. One was replaced and re-tested, and the second remains out of service as it is not currently required and we are having difficulty finding a replacement for this original equipment.

February/March 2016 – Sky Valley administration worked with the school district’s Facilities Department to inventory and assess all of the throw rugs and wall-off matting at the facility. Plans were formulated for removal and/or replacement of older rugs that could not be adequately cleaned.

March 2016 – Instructed staff/administration at Sky Valley to relocate their potting table and composting piles away from classroom unit-ventilator air intakes. This was completed before the end of April.

March 2016 - Instructed staff/administration at Sky Valley to not block the air diffuser grills at the top of the classroom unit-ventilators, and not to block the air return grills near floor level on the front of the unit-ventilators. Administrators at Sky Valley are monitoring compliance with this requirement.

COMMUNICATION

November 30, 2016 – First formal meeting to review and discuss IAQ concerns at Sky Valley.

December 4, 2015 – Written update provided to staff and families.

December 9, 2016 – Received thirty-three questions related to the building and built environment that were collected and collated by a Sky Valley staff member.

December 10, 2015 – Initial meeting with interested Sky Valley staff members (before school).

December 16, 2015 – Second opportunity to meet with interested/concerned Sky Valley staff members (lunchtime), and first meeting with Sky Valley parents (after school).

December 18, 2015 – Provided written response to the thirty-three questions submitted by Sky Valley staff.

January 5, 2016 – Written update provided to staff and families.

January 6, 2016 – Attended meeting of the Sky Valley Parent Advisory group.

January 7, 2016 – Met with interested/concerned Sky Valley staff members.

January 15, 2016 – Written update provided to staff and families.

January 22, 2016 – Written update provided to staff and families.

January 30, 2016 – Written update provided to staff and families.

February 3, 2016 – Attended meeting of the Sky Valley Parent Advisory group.

February 5, 2016 – Written update provided to staff and families.

February 13, 2016 – Written update provided to staff and families.

February 19, 2016 – Written update provided to staff and families.

February 26, 2016 – Written update provided to staff and families.

March 7, 2016 – Written update provided to staff and families.

March 19, 2016 – Written update provided to staff and families.

April 8, 2016 – Written update provided to staff and families.

April 13, 2016 – Attended meeting of the Sky Valley Parent Advisory group.

April 19, 2016 – Debrief PBS Environmental report with interested Sky Valley staff.

April 21, 2016 – Debrief PBS Environmental report with interested Sky Valley parents.

May 3, 2016 – Written update provided to staff and families.

May 11, 2016 – Follow up meeting with interested/concerned Sky Valley staff.

NOTE

All dates are approximate. A number of specific documents, contracts, and email have been utilized to pull together this timeline of activities. However, in an effort to avoid the time and effort it would require to verify the specific date of each and every unique activity we have generalized in many instances.